



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,899	10/30/2003	Steven Francis Best	AUS920030792US1	9243
35525	7590	12/27/2007		
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER HO, BINH VAN	
			ART UNIT 2163	PAPER NUMBER
			MAIL DATE 12/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/697,899

Applicant(s)

BEST ET AL.

Examiner

Binh V. Ho

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 8-9, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Sawdon (U.S. 7,085,785).

(Claims 1, 8-9, and 16)

Sawdon discloses a method in a data processing system for storing data in a file system ("data storage systems", col. 1, lines 19-22), the method comprising determining whether space is available in an inode for a file in the file system ("determining if an inode to be modified in the specified snapshot is an empty inode", claim 1, 9, 17); and responsive to space being available, storing the data in the inode ("response to determining the inode to be modified is an empty inode", claim 1, 9, 17).

3. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Crow (US 2004025490).

(Claim 1)

Crow discloses in figure 8C, 9-11, a method in a data processing system for storing data in a file system, the method comprising determining whether space is available in an inode for a file in the file system (132, "determines whether at least one empty row remains for writing a new extent to the file's inode", paragraph [0041]); and responsive to space being available, storing the data in the inode (142, "If the inode has an empty row, the operating system shifts down the original extents corresponding to segments that will follow the segments to be inserted by one row in the inode", paragraph [0042]).

(Claim 2)

Crow discloses in figures 8A-8C, and 10, to determining whether additional data being present; and responsive to the additional data being present, storing the additional data in a partially filled block of another file (paragraph [0038], [0039], [0042] and [0044]).

(Claims 3, 11,18)

Crow discloses in figures 8A-8C, and 10, to responsive to spacing being unavailable, storing the additional data in a partially filled block of another file ([0034], [0038], [0039], [0042], [0044] and [0048]).

(Claims 4,12,19)

Crow discloses in figure 8C, wherein the partially filled block being a last block of the another file (paragraph [0042]).

(Claims 5,13,20)

Crow discloses in figures 5-10, wherein the space being located in an extension area in the inode.

(Claims 6,14,21)

Crow discloses further comprising determining whether a file size for the data being divisible by a block size for blocks in the file system; and if the file size is divisible by the block size, storing the data in a block (paragraph [0031], [0034]).

(Claim 7)

Crow discloses further comprising determining whether space being available in the inode to store the data; and responsive to room being unavailable in the inode, storing the data in a partially filled block of another file ([0048]).

(Claim 8)

Crow discloses in figures 3 and 8C, a data processing system for storing data in a file system, the data processing system comprising a bus system; a communications unit connected to the bus system; a memory connected to the bus system, wherein the memory includes a set of instructions; and a processing unit connected to the bus system, wherein the processing unit executes the set of instructions to determine whether space is available in an inode of the file in the file system; and store the data in the inode in response to space being available (paragraph [0048] and [0053]).

(Claim 9)

Crow discloses in figure 8C, a data processing system for storing data in a file system, the data processing system comprising determining means for determining whether space is available in an inode of the file in the file system; and storing means, responsive to space being available, for storing the data in the inode (paragraph [0048] and [0053]).

(Claims 10,17)

Crow discloses in figures 5, 8C, and 10, wherein the determining means being a first determining means and the storing means is a first storing means and further comprising second determining means for determining whether additional data is present; and second storing means, responsive to the additional data being present, for storing the additional data in a partially filled block of another file (paragraph [0042]-[0044]).

(Claims 15,22)

Crow discloses in figures 8A-8C, and 10, wherein the determining means being a first determining means and the storing means is a first storing means and further comprising: second determining means for determining whether space is available in the inode to store the data; and second storing means, responsive to room being unavailable in the inode, for storing the data in a partially filled block of another file ([0034], [0038], [0039], [0042], [0044] and [0048]).

(Claim 16)

Crow discloses in figures 3, and 8C, a computer program product in a computer readable medium for storing data in a file system, the computer program product comprising first instructions for determining whether space is available in an inode of the file in the file system; and second instructions, responsive to space being available, for storing the data in the inode (paragraph [0048] and [0053]).

Inquiry

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh V. Ho whose telephone number is 571 272 8583. The examiner can normally be reached on M-F from 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on 571 272 1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Binh V Ho
Examiner
Art Unit 2163



WILSON LEE
PRIMARY EXAMINER